



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,364	02/04/2002	Saul R. Dooley	GB 010016	7419

24737 7590 12/10/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
----------

ISSING, GREGORY C

ART UNIT	PAPER NUMBER
----------	--------------

3662

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/067,364	<b>Applicant(s)</b> DOOLEY ET AL.	
	<b>Examiner</b> Gregory C. Issing	<b>Art Unit</b> 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7, 10, 11 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 3-5, 8, 9, 12, 13 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3662

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 6, 7, 10, 11, and 14-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Underbrink.

Underbrink discloses a satellite acquisition and measurement system wherein after a first GPS signal is acquired from measurements of a satellite signal, subsequent signal acquisitions are made on the basis of information obtained with regard to the first signal. The information obtained includes predictions regarding the expected frequency for the next acquisition based on the previously acquired frequency and the known or estimated maximum changes that can occur due to Doppler and other frequency altering effects. The predictions are based on "statistical probability that the received signal frequency for the next satellite acquisition is within a certain range of a signal frequency based on the frequency (or frequencies) of the previously acquired satellite signal(s)." The "statistical information . . . may be derived from real-life trials." Each subsequent acquisition time is thereby reduced such that the acquisition time is "minimized" and made "as quickly as possible". The alterations in frequency are due to Doppler effects and imprecision in receiver electronics, including clock uncertainties. With respect to the claim language "in the course of a single dwell," however, the specification does not provide any specific limitation to the scope of "a single dwell," therefore any period of time during which the signal is measured/processed meets its scope. Additionally, Underbrink teaches acquiring the signals "as quickly as possible" and "minimizes the computational time," thus, it is clear that an acquisition of a subsequent satellite signal is made "in the course of a single dwell" which may be any definable period of time being short or long. The specification merely exemplifies a "single code instance or dwell" as comprising a time for correlation that may occur over a period of 10 ms or over a period of 100 ms, see page 2 or page 8 of the specification. Even if Underbrink attempts multiple correlations in respective multiple dwell times, the acquisition is achieved during a single dwell time and it does use the

Art Unit: 3662

frequency information with respect to the variations in the frequency. No apparent distinctions are seen between the claim language and the prior art to Underbrink.

The applicants previously argued that the claims require the use of information "relating to variations in the frequency of a first acquired GPS signal" to acquire a second signal. This argument is not convincing since Underbrink teaches using the measured frequencies of the previous measurements as well as estimated or known maximum changes to narrow the range of frequency searching. The measured frequency of the previous signal and the estimated maximum changes thereof define a range of frequencies and meets the scope of "frequency information relating to variations in the frequency of the first acquired signal." Additionally, the predicted changes are based on statistical probability of being within a range, wherein the statistical information may be derived from real-life trials, and on the frequencies of the previously acquired satellite signals (col. 7). Moreover, the Doppler effects are by definition, variations in frequency based on the movement of the source and/or receiver. It is this information in accordance with the method of Underbrink that is utilized during an acquisition period to acquire a second GPS satellite. Thus, the applicant's argument is not convincing.

3. Claims 3-5, 8, 9, 12, 13 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

Art Unit: 3662

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is 703-306-4156. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 703-306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory C. Issing  
Primary Examiner  
Art Unit 3662

gci